

Klamath Network Featured Creature January, 2009

Toyon (Heteromeles arbutifolia)

General Description:

One of the most common and recognizable shrubs or small trees of the chaparral, oak woodlands, and low elevation forests of California is toyon (Heteromeles arbutifolia). It is also known as California holly and Christmas berry. As reflected in these pseudonyms, it has leaves and fruits that are reminiscent of holly. Also like holly, the bright red fruit is produced in late fall and persists through the Christmas season, if not devoured by birds such as Cedar Waxwings and Robins. However, unlike holly, toyon is in the rose family, and toyon leaves are elliptical and about 5-10 cm in length and 2-4 cm wide. The rosaceous, white flowers of toyon are about 1 cm in size and displayed in mildly fragrant clusters. Hollywood is said to be named for the abundant Christmas berries that still adorn the hillsides of the area.

Life History:

Toyon nearly always survives the crown consuming fires that typify chaparral. It resprouts vigorously from the base. Repeated coppiceresprouting produces a swollen, burllike root-crown. This general feature is characteristic of Mediterranean vegetation but rarely found elsewhere. Toyon does not have fire-induced seed germination from dormant seed banks, like many other Mediterranean shrubs. Germination instead occurs in the interval between fires. Seed is widely dispersed by birds. Most new recruitment occurs in long-unburned, old-growth chaparral. Toyon can overtop and shade out competing chaparral shrubs.





To grow under dense shrub or forest canopy, the leaves must be very shade tolerant. In the shade, the leaves are larger and held horizontally. This allows them to maximize light reception. In the sun, conversely, the leaves point upward, minimizing incoming solar radiation. This helps moderate leaf temperatures and improves the plant's water use efficiency. Without shedding leaves, toyon and other chaparral shrubs endure a long, dry summer, characteristic of the Mediterranean climate. A common foliar feature, which toyon also exhibits, is the thick, waxy, tough, and leathery (sclerophyllous) leaves that are very resistant to desiccation or herbivores. Among chaparral shrubs, toyon has unusually large leaves that are very long-lived, up to 7 years.

Distribution

Toyon is one of a handful of the over 100 chaparral shrubs that are widely distributed across the range of the widespread vegetation. It occurs from northern Baja California northward through the coast ranges and Sierra Nevada foothills of California. Recently, it was discovered just north of the California border in Oregon.

Where to see in the Network:

Toyon is common at Whiskeytown but has not been documented in other Network parks. It likely grows somewhere in Redwood, so be on the lookout! Toyon is also a very popular and hardy ornamental.

More Information:

Wikipedia Fire Effects Information System